Applicant: Katsumi Fujimoto et al. Attorney's Docket No.: 14875-101001 / C1-107PCT-US

Serial No.: 10/078,650

Filed: February 19, 2002

Page : 2 of 7

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An isolated nucleic acid selected from the group consisting of:

- (a) a nucleic acid comprising the coding region of [[the]] <u>a</u> nucleotide sequence <u>selected from the group consisting</u> of SEQ ID NO:1, 11, [[or]] <u>and</u> 13;
- (b) a nucleic acid encoding a protein comprising [[the]] <u>an</u> amino acid sequence <u>selected from the group consisting</u> of SEQ ID NO:2, 12, [[or]] <u>and</u> 14;
- (c) a nucleic acid encoding a protein comprising a modified sequence of an amino acid sequence selected from the group consisting of SEQ ID NO:2, 12, [[or]] and 14, wherein the protein encoded by said nucleic acid retains the biological activity of the protein comprising the amino acid sequence of SEQ ID NO:2, 12, or 14;
- (d) a nucleic acid that hybridizes under stringent conditions to a sequence comprising [[the]] a nucleotide sequence selected from the group consisting of SEQ ID NO:1, 11, [[or]] and 13, and encodes a protein that retains the biological activity of [[the]] a protein comprising the amino acid sequence of SEQ ID NO:2, 12, or 14; and
- (e) a nucleic acid encoding a partial peptide of [[the]] <u>a</u> protein <u>selected from the group consisting</u> of SEQ ID NO:2, 12, [[or]] <u>and</u> 14.
- 2. (Original) The nucleic acid of claim 1, wherein the modification referred to in part (c) is a substitution or deletion of less than 20 amino acid residues in the sequence of SEQ ID NO:2, 12, or 14.
- 3. (Original) The nucleic acid of claim 1, wherein the modification referred to in part (c) is a substitution of one or more amino acids in the sequence of SEQ ID NO:2, 12, or 14 with one or more amino acids that allows the properties of a corresponding amino acid side chain to be conserved.

Applicant: Katsumi Fujimoto et al. Attorney's Docket No.: 14875-101001 / C1-107PCT-US

Serial No.: 10/078,650

Filed: February 19, 2002

Page : 3 of 7

4. (Original) The nucleic acid of claim 1, wherein the modification referred to in part (c) is an addition of one or more amino acids to the sequence of SEQ ID NO:2, 12, or 14 that results in a fusion protein.

- 5. (Original) A vector into which the nucleic acid of claim 1 is inserted.
- 6. (Original) A transformant carrying the nucleic acid of claim 1.
- 7. (Original) A substantially pure protein or peptide encoded by the nucleic acid of claim 1.
- 8. (Original) A method for producing a protein or peptide encoded by the nucleic acid of claim 1, comprising the steps of:
- (a) culturing a transformant carrying the nucleic acid of claim 1 or a vector into which the nucleic acid of claim 1 is inserted;
 - (b) allowing the transformant to express the protein or peptide; and
- (c) recovering the expressed protein or peptide from the transformant or culture supernatant.
- 9. (Currently amended) An isolated nucleic acid comprising at least 15 nucleotides, wherein the nucleic acid is complementary to a nucleotide sequence comprising [[the]] <u>a</u> sequence <u>selected from the group consisting</u> of SEQ ID NO:1, 11, [[or]] <u>and</u> 13, or to the complementary strand thereof.
- 10. (Original) The nucleic acid of claim 9, wherein the nucleic acid is completely complementary to a continuous region of at least 15 nucleotides in the sequence of SEQ ID NO:1, 11, or 13, or has a homology of at least 70% to the sequence of SEQ ID NO:1, 11, or 13.

Applicant: Katsumi Fujimoto et al. Attorney's Docket No.: 14875-101001 / C1-107PCT-US

Serial No.: 10/078,650

Filed: February 19, 2002

Page : 4 of 7

11. (Original) A method of screening for a compound that binds to the protein or peptide of claim 7, comprising the steps of:

- (a) contacting a test sample containing at least one compound with said protein or partial peptide;
- (b) detecting the binding activity of said protein or partial peptide with a compound in the test sample; and
 - (c) selecting a compound that has a binding activity to said protein or partial peptide.
 - 12. (Original) A compound that binds to the protein or peptide of claim 7.
 - 13. (Original) The compound of claim 12, wherein said compound is an antibody.
- 14. (Original) The compound of claim 12, wherein said compound is isolated by a method comprising the steps of:
- (a) contacting a test sample containing at least one compound with said protein or partial peptide;
- (b) detecting the binding activity of said protein or partial peptide with a compound in the test sample; and
 - (c) selecting a compound that has a binding activity to said protein or partial peptide.
 - 15. (Original) A transformant carrying the vector of claim 5.